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10/687,559	10/15/2003	Toshio Yamamoto	2933AS-11	7147

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EXAMINER

PHAN, THIEM D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/687,559

Applicant(s)

YAMAMOTO ET AL.

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/9/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: PTO-413B.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicants' election without traverse of Group II, Claims 14-19, filed on 10/19/04 is acknowledged.

The Restriction mailed on 09/29/04 has been carefully reviewed and is held to be proper. Moreover Applicants did not distinctly and specifically point out any error in the Restriction Requirement. Accordingly, Claims 1-13 and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim.

The Restriction filed on 9/29/04 is hereby **made Final**.

Applicants are required to cancel these nonelected claims (1-13 and 20) or take other appropriate action.

An Office Action on the merits of Claims 14-19 now follows.

### *Specification*

2. The disclosure is objected to because of the following informalities:

- On page 1, before "Technical Field", insert:

"Cross Reference to Related Documents:

This application claims the benefit of Japanese Patent Applications No. 2002-304670, filed 10/18/02 and 2003-014907 filed 1/23/03."

- The following title is suggested: "Method for Winding Coils on Rotor Core".

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14, 16 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Becherucci et al (US 6,532,645 B1) hereinafter '645.

**As applied to claims 14 and 19**, the '645 teaches a method of wire-winding for dynamo-electric motor, comprising:

- holding with a jig or plier (Cf. Fig. 19, 31) one of the core members or pole portion (Cf. Fig. 19, 20') prior to assembly at at least one of the teeth of the core member; and
- rotating the core member or pole portion (Cf. Fig. 19, 20'; col. 12, lines 18 ff.) held by the jig or plier (Cf. Fig. 19, 31) about a rotation axis along the extending or longitudinal direction of at least one of the teeth or pole portion (Cf. Fig. 19, 20'), thereby winding the wire forming the coil about the one tooth.

The recitation "... wherein the rotor core ... angular intervals," (Cf. Claim 19, Preamble) has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

**As applied to claim 16**, the '645 teaches that, during rotation of the core member or pole portion (Cf. Fig. 19, 20'), a guiding member or nozzle (Cf. Fig. 19, 598) which guides the wire to the coil winding portion, is reciprocated along the extending direction (Cf. Fig. 19, 588 & 590; col. 12, lines 57 ff.) of the pole or tooth about which the wire is wound in order to distribute the wire evenly.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the '645

The '645 teaches a method of wire-winding for dynamo-electric motor, which reads on Applicants' claimed invention, including:

- fixing the wire to a projection or anchoring device on the jig (Cf. Fig. 19, 600) prior to winding the wire (Cf. Fig. 19, W) around the tooth or pole (Cf. Fig. 19, 20'); and
- fixing a portion of the wire extending from the tooth to another projection or anchoring device on the jig (Cf. Fig. 19, 660; col. 12, lines 63 ff.) after winding the wire, and cutting the extending portion of the wire.

It is a mere matter of design choice to have the wire fixed to a projection on the pole or tooth prior to and after winding and it appears that the invention would perform equally well with the anchored wires being transferred later to the posts on the pole or tooth after the winding process (Cf. Col. 13, lines 3 ff.).

7. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '645 in view of Schmidt et al (Pub 2004/0113511 A1) hereinafter '511 or vice versa.

**As applied to claim 15**, the '645 teaches a method of winding the pole or tooth structure of a motor by rotating the pole or tooth structure (Cf. Fig. 19, 20') with respect to a wire guider or nozzle (Cf. Fig. 19, 598) in order to control and limit the free wire between the flyer (of conventional winding machine) and the part being wound as much as possible (Cf. Col. 1, 29 ff.).

The '511 teaches a two-parts rotor structure of carrying bodies (Cf. Fig. 2a & 2b, 3 & 5) which facilitate the winding process (Cf. Page. 1, paragraph 6) because of the large distance between the poles (Cf. Fig. 2a, 11) of an individual carrying body.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the two-parts rotor structure, as taught by the '511, in order to ease the winding process of the pole or tooth of the rotor.

**As applied to claim 17**, the '645 teaches a method of winding the pole or tooth structure of a motor by rotating the pole or tooth structure (Cf. Fig. 19, 20') with respect to a wire guider or nozzle (Cf. Fig. 19, 598) in order to control and limit the free wire between the flyer (of conventional winding machine) and the part being wound as much as possible (Cf. Col. 1, 29 ff.).

The '511 teaches a two-parts rotor structure with two parallel teeth or poles of carrying bodies (Cf. Fig. 2a & 2b, 3 & 5) which facilitate the winding process (Cf. Page. 1, paragraph 6) because of the large distance between the poles (Cf. Fig. 2a, 11) of an individual carrying body.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the two-parts rotor structure with two parallel teeth or poles, as taught by the '511, and doubling the winding nozzle in order to speed the winding process of the poles or teeth of the rotor.

8. Claim 19 is further rejected under 35 U.S.C. 103(a) as being unpatentable over the '645 in view the '511 or vice versa.

The '645 teaches a method of wire-winding for dynamo-electric motor, comprising:

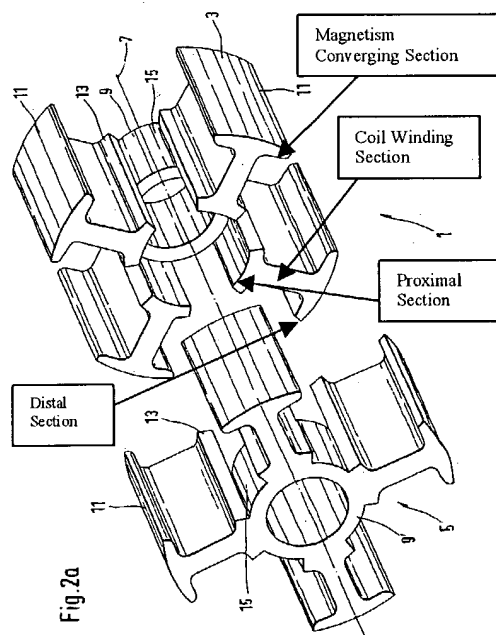
- holding with a jig or plier (Cf. Fig. 19, 31) one of the core members or pole portion (Cf. Fig. 19, 20') prior to assembly at at least one of the teeth of the core member; and
- rotating the core member or pole portion (Cf. Fig. 19, 20'; col. 12, lines 18 ff.) held by the jig or plier (Cf. Fig. 19, 31) about a rotation axis along the extending or longitudinal direction of at least one of the teeth or pole portion (Cf. Fig. 19, 20'), thereby winding the wire forming the coil about the one tooth in order to control and limit the free wire between the flyer (of conventional winding machine) and the part being wound as much as possible (Cf. Col. 1, 29 ff.).



The '511 teaches a two-parts rotor structure of carrying bodies (Cf. Fig. 2a & 2b, 3 & 5) wherein the rotor core includes a ring body (Cf. Fig. 2a, 9) and a plurality of teeth (Cf. Fig. 2a, 11) extending radially outward from an outer circumference of the ring body (Cf. Fig. 2a, 9), wherein each tooth includes a coil winding portion (Cf. Fig. 2a, below) about which a coils (Cf. Fig. 1c, 17) is wound, wherein the coil winding portion includes a proximal section (Cf. Fig. 2a, below) and a distal section (Cf. Fig. 2a, below), the proximal section being coupled to the ring body, and the distal section being located radially outward of the proximal section, wherein a magnetism converging section (Cf. Fig. 2a, below) is provided at the distal section of the coil winding portion, wherein the rotor core includes a plurality of core members assembled to form the rotor core, wherein each core member (Cf. Fig. 2a, 3 & 5) has part of the teeth (Cf. Fig. 2a, 11) the number of which obtained by dividing the total number of the teeth (Cf. Fig. 2a, 11) of the rotor core (Cf. Fig. 2b, 1) by the number of the core members (Cf. Fig. 2a, 3 & 5), and wherein the teeth (Cf. Fig. 2a, 11) of each core member (Cf. Fig. 2a, 3 & 5) are spaced at equal angular intervals and far apart to facilitate the winding process (Cf. Page. 1, paragraph 6) due to the large distance between the poles or teeth (Cf. Fig. 2a, 11) of an individual carrying body (Cf. Fig. 2a, 3 & 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the two-parts rotor structure, as taught by the '511, in order to limit the free wire then to ease and to speed up the winding process of the poles or teeth of the rotor.

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### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M - F, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3729

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tim Phan  
Examiner  
Art Unit 3729

  
**CARL J. ARBES**  
**PRIMARY EXAMINER**

tp  
December 2, 2004